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Mitsuaki Komino

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EXAMINER

CHEN, KEATH T

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## **DETAILED ACTION**

### ***Response to Amendment***

There is no amendment submitted in the after final filing on 10/22/2008.

### ***Response to Arguments***

Applicant's arguments filed on 10/22/2008 have been fully considered but they are not persuasive:

1. In regarding to 35 USC 112 first paragraph rejections of Claims 1-2, 6-8, 10-11, and 14, Applicants' arguments with respect to independent claims 1 and 6 "a portion of the metal plates extending to an outside of the semiconductor manufacturing device", by clarify that the metal plates 51a and 51b are integral to the flange 52, see the fourth paragraph of page 2. This is accepted and claims 1 and 2 would have been withdrawn if submitted in separate paper. However, Applicants' second argument with respect to independent claims 6 "the metal plates being arranged so as to detachably cover the inner wall face ..." by stating that the whole heating unit is detachable means metal plates are detachable. This argument is not persuasive. The whole heating unit being detachable is different than the parts (metal plates) being detachable; the latter includes the possibility that other parts of the heating unit being not detachable.

2. In regarding to 35 USC 103(a) rejection of claims 1-2, 6-7, and 13 based on Umotoy '381, in view of Nakamura '285 and Myers '557, Applicants' argument is that the above combination does not teach "a space between the metal plates in a region of the metal plates which is to be exposed to the processing gas is sealed with a spacer at edges of the metal plates in the region to be exposed to the processing gas, and

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wherein edges of the portion of the metal plates which extends to the outside are open to the outside” by

(a) asserting that the examiner has concluded/proposed combination is to replace heater 215 of ‘381 with 104 of ‘285, see the lines 4-6 and the last 5 lines of page 5;

(b) further asserting that “the examiner concludes that ... replaced the embedded hater 215 of Umotoy with the heat generating unit 104 of Nakamura, and to use the ceramic sealant 23 of Myers to seal the end of the heater 103 of Nakamura”, see the third paragraph of page 5.

Applicants' assertions above are not representative of the examiner's statements, see the first complete paragraph of page 6 of the final office action (07/22/2008). The replacing of 215 of Umotoy with the heater 104 of Nakamura is not examiner has put forth, nor does use ceramic sealant 23 of Myers to seal the end of the heater 103 of Nakamura.

(c) With the above assertions, Applicants argue that Nakamura's heater 104 are flush with the end of the plate 104a, and does not disclose a space which is sealed with a spacer, see the last 5 lines of page 6.

(d) Meyers ceramic sealant protudes beyond the layer of sensors, see the top paragrpah of page 7.

These arguments are not persuasive. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references.

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See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

The combination is based on '381, '285, and '557. '381 teaches an embedded heater but is silent on how it is embedded. '285 teaches metal plate sandwich heater plate. A person of ordinary would adopted the teaching of '285 to build an embedded heater by using metal plates to replace the integrated embedded liner/heater of Fig. 2a of '438. A person of ordinary skill in the art would notice that the heater of '438 is not exposed (the shaded part above the heater #215) and replacing the heater/liner with metals plates would leaves space between the metal plates (above the heater #215). '557 teaches ceramic sealant to protect one end of the heater. With sealant between the space above the heater 215, an combination embedded heater would have reproduced the shape as shown in Fig. 2a of '381.

The examiner does not agree with Applicants' narrow interpretation that '557 teaches only applying sealant protrude beyond the sensor. A person of ordinary skill in the art would have recognized that the sealant can be applied to where it's needed and function to seal with reasonable expectation success.

The examiner does not agree with Applicant's narrow interpretation that '285 teaches only metal plates flush with heater plate. A person of ordinary skill in the art would have recognized that extending electrode plate would function as heater with reasonable expectation of success; particularly to achieve the embedded heated as shown in Fig. 2a of '381.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEATH T. CHEN whose telephone number is (571)270-1870. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Cleveland can be reached on 571-272-1418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. T. C./  
Examiner, Art Unit 1792  
/Ram N Kackar/  
Primary Examiner, Art Unit 1792